

BUTLER -- 10/823,776
Client/Matter: 081468-0309172

REMARKS

Claims 1-15 are pending. By this Amendment, claims 1-3, 5-7 and 9-11 are amended, and claims 13-15 are added. Prompt examination and favorable consideration are respectfully requested.

Claims 1, 9 and 10 have been amended to recite that the native feedback signal represents an imaging characteristic of the lithographic projection apparatus. The feature of the imaging characteristic including at least one of focus, magnification, and/or distortion has been added in dependent claims 13, 14 and 15, respectively.

Another example of an imaging characteristic of the lithographic apparatus is a Zernike function, which represents an imaging aberration(s) of the projection system. The native coordinates and the native signals, including the native feedback signal and the native set-point signal, may include a Zernike function, or parts of a Zernike function. An example of a Zernike function is a Zernike polynomial, or polynomials, as a function of angle and radius in a reference plane of a lens of the projection system. The control signal is generated on the basis of the native set-point signal and native feedback signal, which may include a Zernike polynomial or polynomials. The control of the position of either the patterning device, or the substrate, or the projection system, or a component of the projection system, or any combination thereof, on the basis of the control signal may therefore include a Zernike function as an imaging characteristic of the lithographic apparatus.

Respectfully submitted,

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